REPORT / RECOMMENDATION

To: Edina Transportation Commission

Agenda Item #: VI. B.

From: Byron Theis – Traffic Safety Coordinator

Action ☒
Discussion ☐
Information ☐

Date: January 11, 2013

Subject: Traffic Safety Committee Report of January 2, 2013

Action Requested:
Review and recommend Traffic Safety Committee (TSC) Report of Wednesday January 2, 2013, be forwarded to City Council for approval.

Information / Background:
It is not anticipated that residents will be in attendance at the meeting regarding any of the attached issues. An overview of the comments from the Edina Transportation Commission (ETC) will be included in the staff report provided to Council for their February 19, 2013 meeting.

Attachments:
Traffic Safety Review for January 2, 2013.

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TRAFFIC SAFETY COMMITTEE REPORT

Wednesday, January 2, 2013

The Traffic Safety Committee (TSC) review of traffic safety matters occurred on January 2. The Director of Engineering, Public Works Director, Police Traffic Supervisor, the Community Development Director, the Sign Coordinator, and Traffic Safety Coordinator were in attendance for this meeting.

From these reviews, the recommendations below are provided. On each of the items, persons involved have been contacted and staff recommendation has been discussed with them. They were informed that if they disagree with the recommendation or have additional facts to present, they can be included on the January 17, Edina Transportation Commission and the February 19 City Council agenda.

SECTION A:
Requests on which the Committee recommends approval:

At this time, there are no requests that are recommended for approval.

SECTION B:
Requests on which the Committee recommends denial:

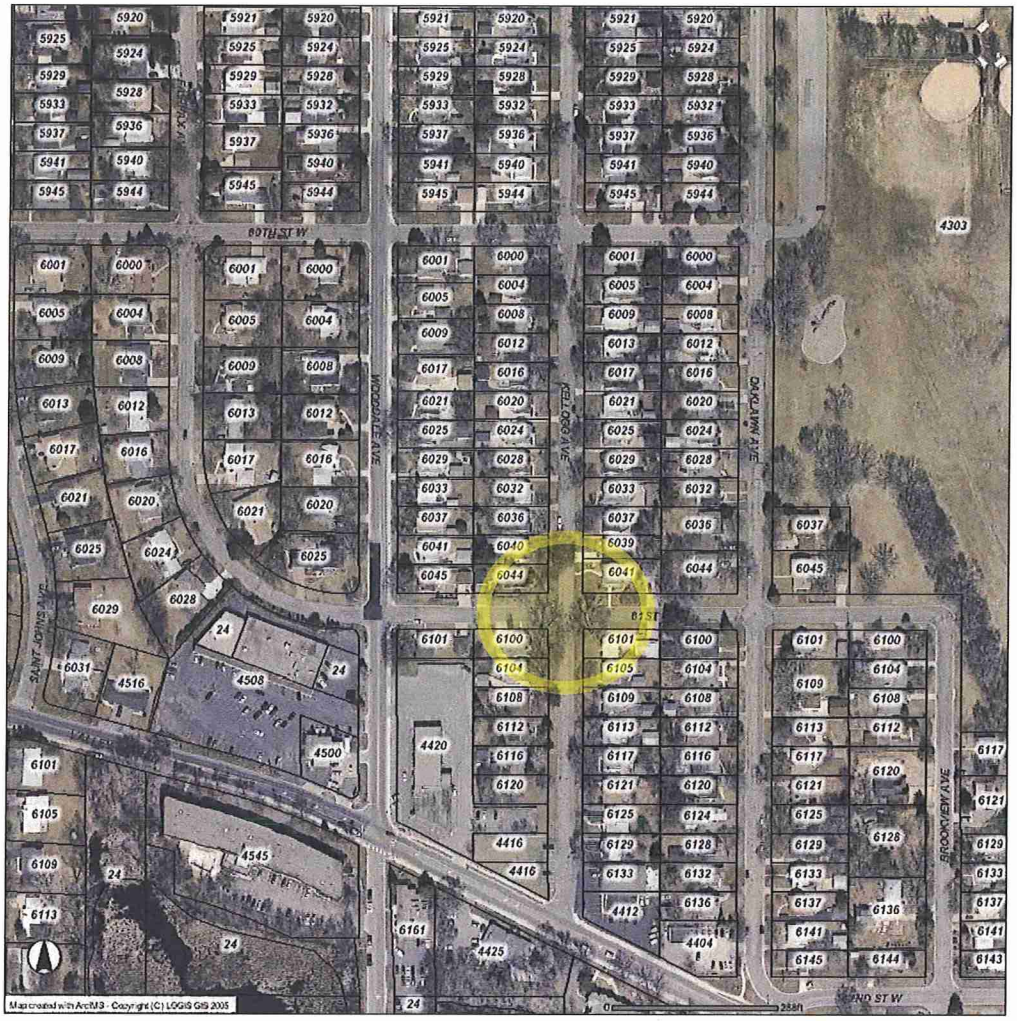
1. This request was reviewed at the November 15th, 2012, ETC meeting. The ETC recommended the following:

   Motion was made by member Janovy and seconded by member Bass for staff to evaluate moving the yield sign to 61st Street and to also evaluate installing stop signs since the basket weave is already in place and the stop sign would complete the weave. All voted aye. Motion carried.

   The request is to install stop signs at the intersection of Kellogg Avenue and 61st Street West; the intersection currently has yield signs on Kellogg Avenue. This was a second request to install stop signs at this location. The first request occurred in July of 2012, which the City Council concurred. A crash at this location in October prompted a second request to install stop signs at this location.

   61st Street West and Kellogg Avenue are both classified as local streets, see map. Sight lines are very good for all four directions into the intersection, see photos.

   Two recorded accidents have occurred at this location since 2001; these accidents occurred in 2012, see attached 2012 Traffic and Crash Data for Kellogg and 61st. Both accidents were caused by northbound vehicles that failed to yield to the east-west moving vehicles.



Map: 61st Street West and Kellogg Avenue

Photo 1: 61st Street looking eastbound.

Photo 2: Kellogg Ave looking northbound

Photo 3: Kellogg Ave looking southbound

The City of Edina has stop sign warrant polices that are based off of the Minnesota Manual for Uniform Traffic Control Devises (MNMUTCD); however, these policies have not been updated with the new MNMUTCD, therefore staff is using the new MNMUTCD for analysis of the intersection. The MNMUTCD describes guidance and standards that should be used for installation of regulatory signs such as stop signs. The MNMUTCD guidance states:

> *At intersections where a full stop is not necessary at all times, consideration should first be given to using less restrictive measures such as YIELD signs (see Sections 2B.8 and 2B.9).*
>
> *The use of STOP signs on the minor-street approaches should be considered if engineering judgment indicates that a stop is always required because of one or more of the following conditions:*
>
> *A. The vehicular traffic volumes on the through street or highway exceed 6,000 vehicles per day;*

B. *A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway; and/or*
C. *Crash records indicate that three or more crashes that are susceptible to correction by the installation of a STOP sign have been reported within a 12-month period, or that five or more such crashes have been reported within a 2-year period. Such crashes include right-angle collisions involving road users on the minor-street approach failing to yield the right-of-way to traffic on the through street or highway.*

In many low volume situations with no unusual history of intersection crashes, no control at the intersections is a cost effective strategy. Research suggests that at most locations, increasing the level of intersection control will not improve safety (see FHWA-RD-81-084 Stop, Yield and No Control at Intersections).

Keep in mind that unwarranted placement of any sign can lead to negative consequences. Installing a stop sign without meeting the required warrants will reduce the effectiveness of all stop signs in the area. This reduced effectiveness is shown by an increase of vehicles, "rolling through" or entering the intersection at a higher rate of speed than the intersection is capable of handling. This increases the chance of crashes which will make the intersection more dangerous. Research has also shown that placing stop signs increases peak speed at the midblock of streets, because drivers will speed to regain lost time at stop signs. Yield signs have the benefit of assigning right-of-way only when needed. Stop signs will require vehicles to stop during non-peak times at the intersection. Other negative consequences include increased local pollution due to stopped vehicles, and an increase in noise due to vehicles accelerating after stopping.

The total ADT entering the intersection equals 417 vehicles per day, which does not comply with the MNMUTCD. See attached traffic counts. Other warrants stated in the MNMUTCD for placing a Stop sign have also not been met.

Staff also studied the turning movements of the intersection to see if the existing yield signs are placed on the correct street and also to be able to recommend which street a stop sign be placed if the ETC recommends to the City Council that stop signs be placed at this intersection, see attached turning movements. The turning movement conducted shows that a majority of afternoon peak travel traffic is travelling northbound and westbound at the intersection. This could indicate that traffic is using both streets as a cut-through to avoid other intersections in the area.

Staff recommends denial of request for stop signs at the intersection of Kellogg Avenue and 61st Street West. However, based on the intersection turning movements staff recommends that the Yield signs be moved to 61st Street West.

If the ETC and the City Council wish to install stop signs at this location staff recommends that they be installed on 61st Street West.

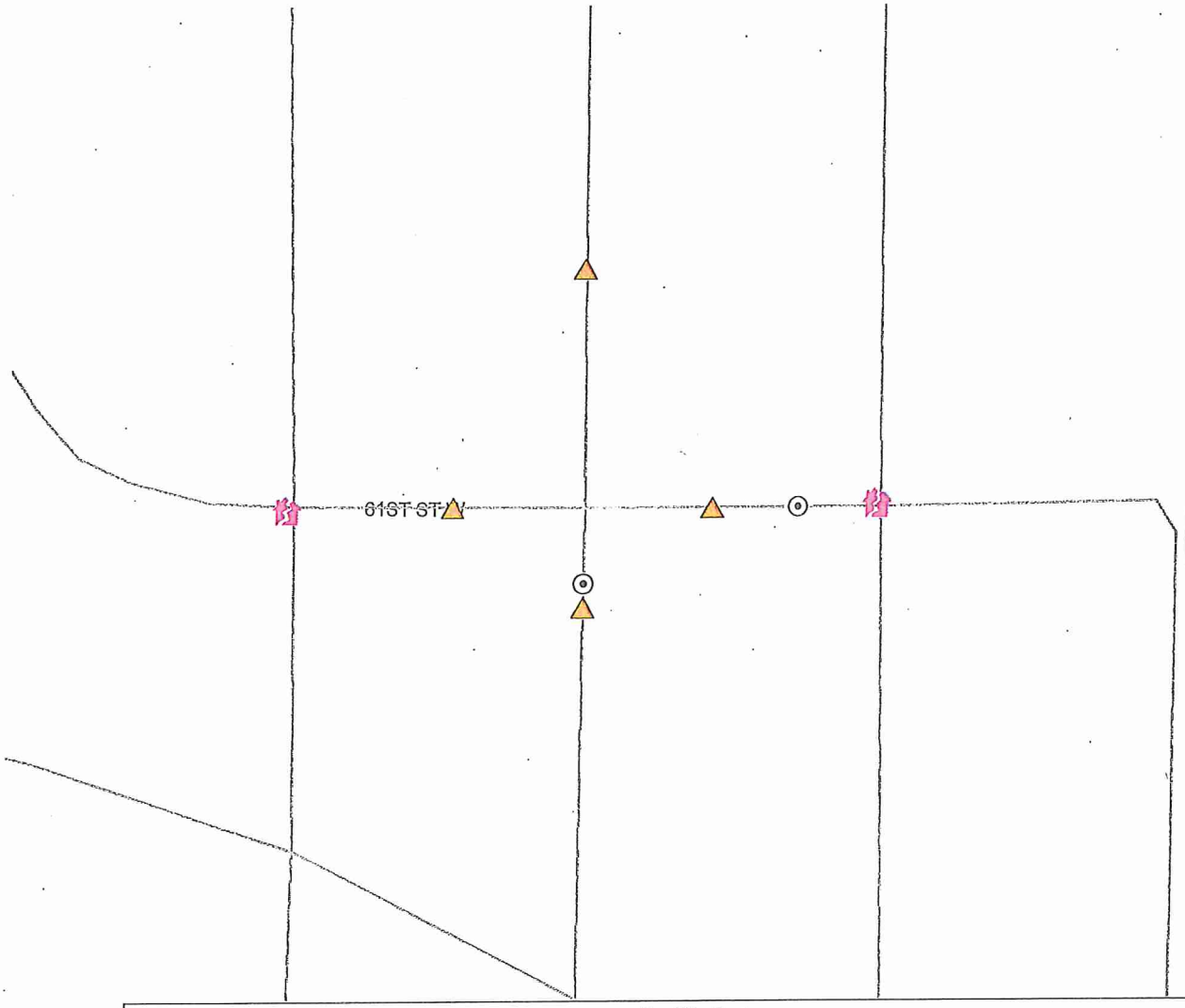
SECTION C:
Requests that are deferred to a later date or referred to others.

At this time, there are no requests that require deferral to a later date.

SECTION D:
Other traffic safety issues handled.

1. Call from a resident inquiring about the plowing schedule for Edina streets. Call was forwarded to Public Works, who manages the schedule for street plowing.

2012 Traffic and Crash Data for Kellogg and 61st



Traffic Data

Location	Description	Year	ADT*	ADT Entering Intersection	85th Speed, MPH**
1	W. 61st Street west of Kellogg	2012 Fall Recount	167	56	25.4
		2012 Fall Count	106	12	23.6
		2012	177	68	23.2
2	Kellogg Ave. north of W 61st Street	2012 Fall Count	261	106	29.7
		2012	275	82	28.5
3	W. 61st Street east of Kellogg	2012 Fall Count	146	84	23.5
		2012	125	77	22.7
		2001	2061	NA	35.3
4	Kellogg Ave. south of 61st Street	2012 Fall Count	293	171	24.7
		2012	352	205	25
		2003	437	NA	27

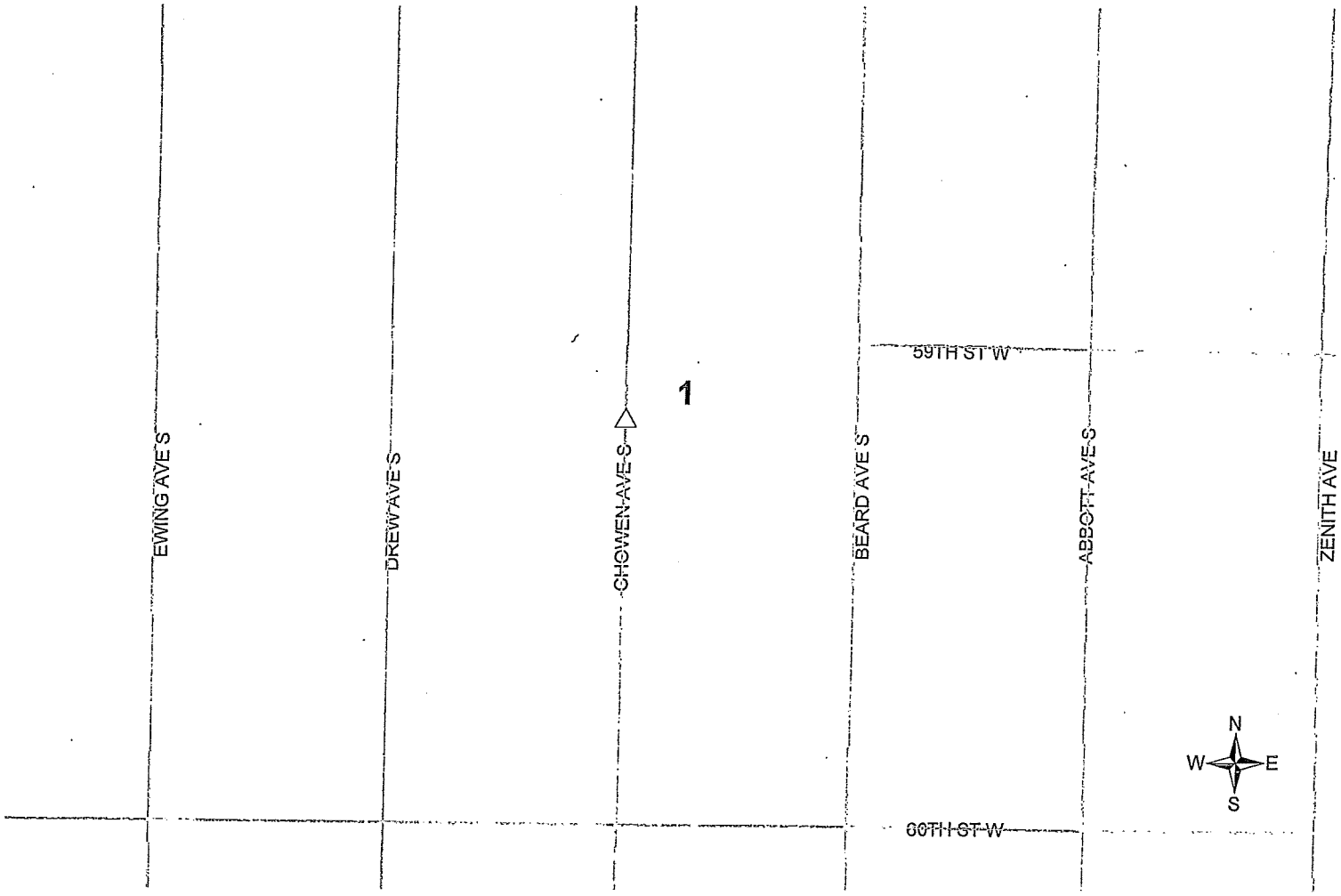
* ADT is the Average Daily Traffic on a typical Monday-Friday

** 85th percentile spped is the speed at which 85% of vehicles measured are travelling at or below

Crash Data

Location	Severity	Year	Month	Time
A	Property Damage - No Apparent Injury	2008	Oct.	1605
B	Property Damage - No Apparent Injury	2008	Jan.	1505
	Property Damage - No Apparent Injury	2001	Aug.	1800

Traffic Counts for Chowen Avenue



Location	Description	Year	ADT *	ADT Over 25 MPH		ADT Over 30 MPH		85th Percentile Speed **	
				NB	SB	NB	SB	NB	SB
1	Chowen Avenue South of 58th Street	2012	241	60	61	15	11	29.3	28.6
	West Shore Dr. North of Wilford Way	2010	313	67	74	16	20	29.0	29.6

* ADT is the Average Daily Traffic on a typical Monday-Friday

** 85 percentile speed is the speed at which 85% of vehicles measured are travelling at or below.

City of Edina

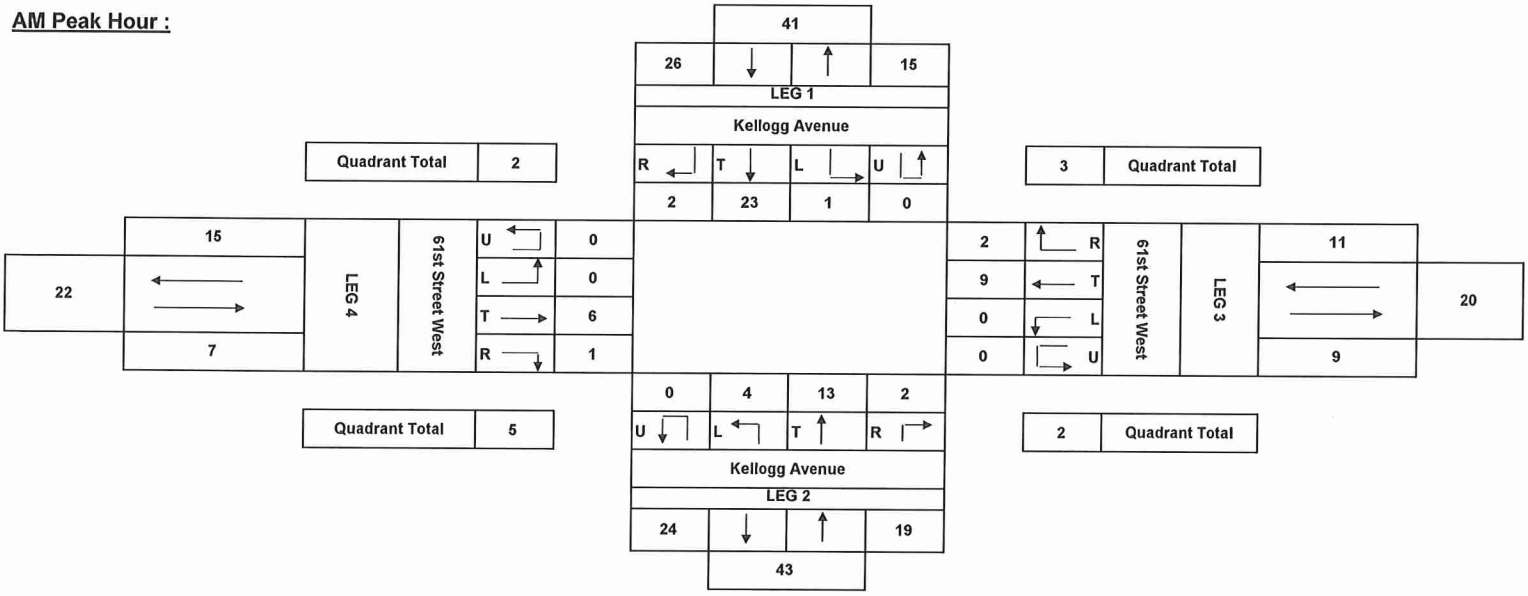
Turning Counts Study - Field Sheet

Request No.:	NA
Job No.:	NA

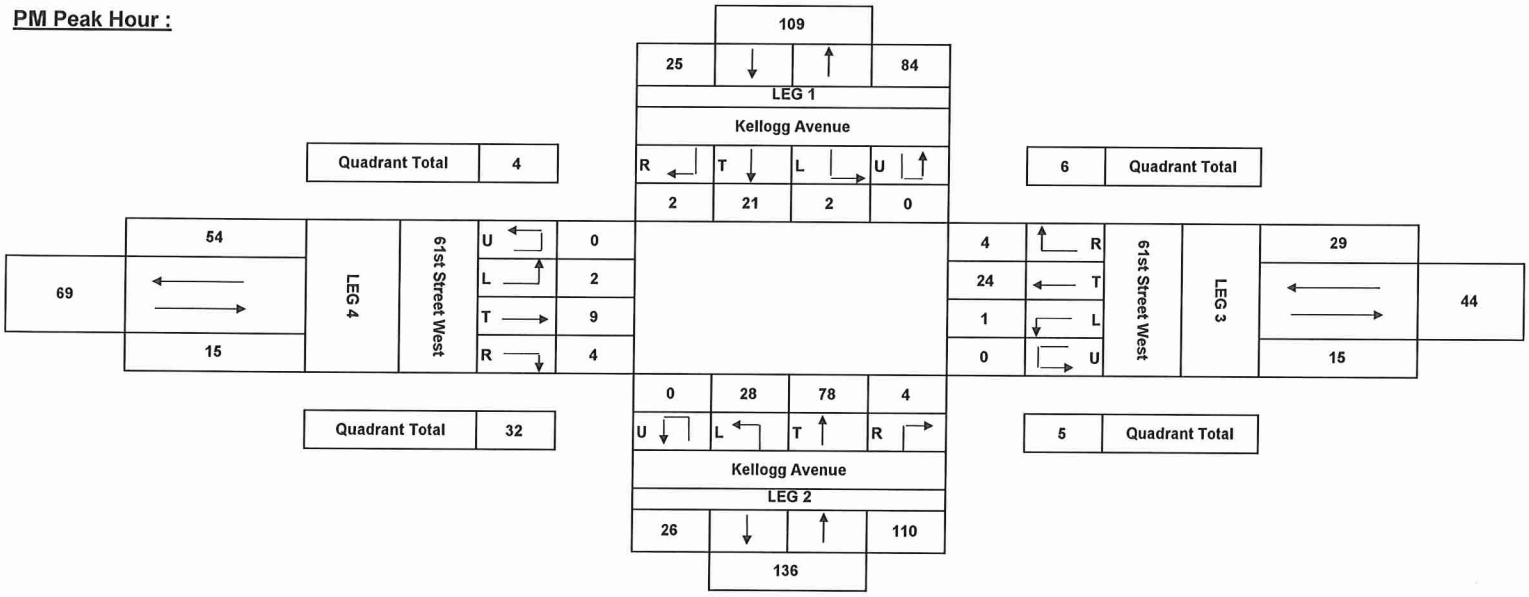
Location:		County:	Henn.
Date:	12/19-12/20 / 12/19-12/20	Town:	Edina
Recorder:		Weather:	Clear
Interval (dd) : (In Minutes)	15		

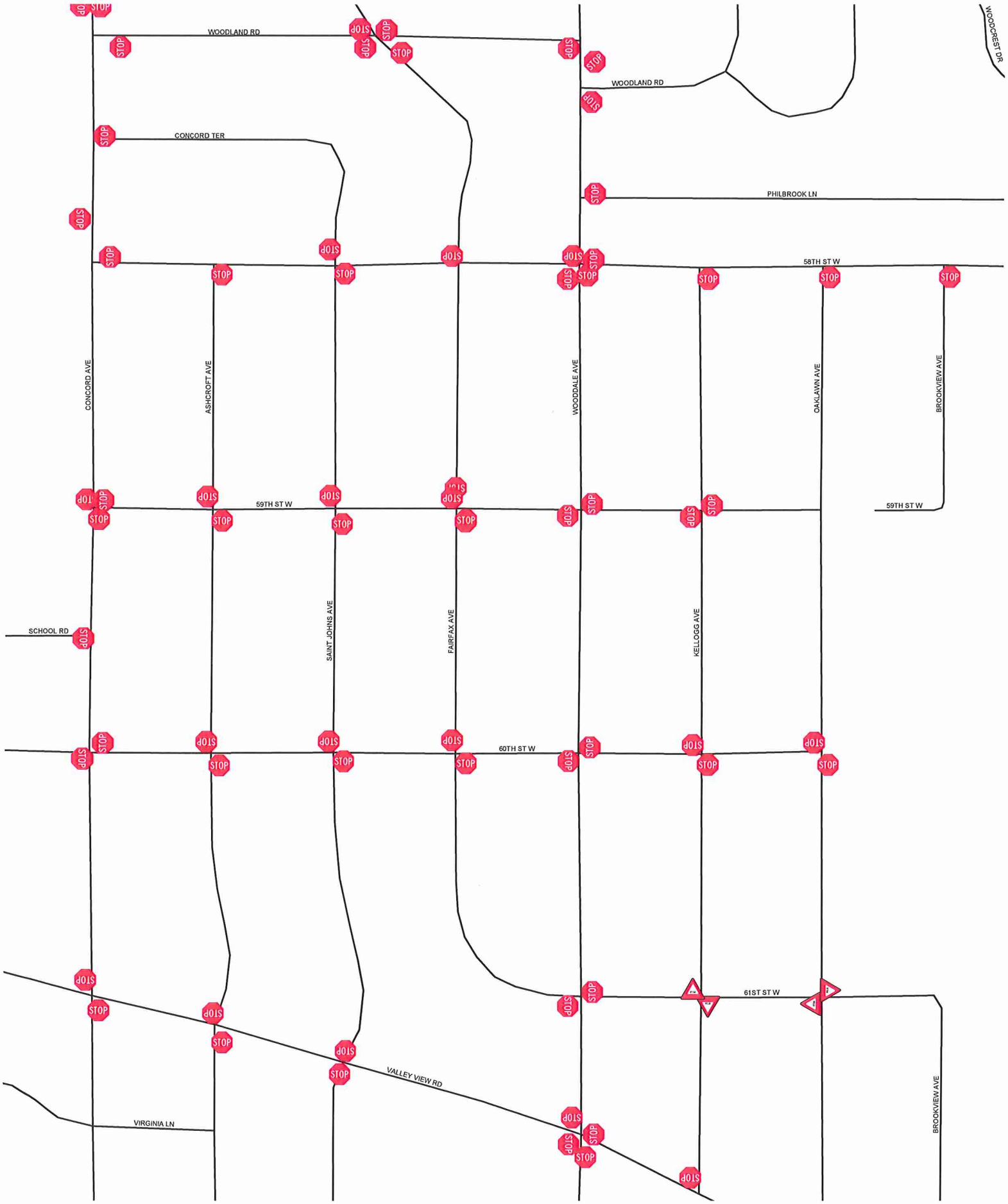
PEAK HOURS	AM PERIOD 7:00-10:00	Start	End	Volume	PM PERIOD 16:00-19:00	Start	End	Volume
		07:00	10:00	0		16:00	19:00	0

AM Peak Hour :



PM Peak Hour :





City of Edina
Traffic Control

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Engineering Dept
January, 2013

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